

What Is Claimed Is:

1. A method for supplying a fuel, comprising:  
splitting-up the fuel at a separation device into a first fuel fraction in the form of a retentate and into a second fuel fraction in the form of a permeate; and  
acting upon the separation device by a scavenging gas on a permeate side, so that a mixture of a fuel permeate and the scavenging gas is produced.
2. The method according to claim 1, wherein the fuel is supplied for operating one of a combustion engine in a motor vehicle and a turbine.
3. The method according to claim 1, wherein the fuel is fractioned into a fuel retentate and a fuel permeate by pervaporation at a membrane.
4. The method according to claim 1, wherein, using a membrane, the fuel is fractioned into a fuel retentate having at least one of a first centane number and a first boiling point, and a fuel permeate having at least one of a second centane number and a second boiling point, wherein at least one of (a) the second centane number is lower than the first centane number and (b) the second boiling point is lower than the first boiling point.
5. The method according to claim 1, wherein, on the permeate side, a membrane is acted upon by one of air and an oxygen-containing gas mixture as scavenging gas under one of normal pressure and superpressure.
6. The method according to claim 1, further comprising:  
conducting the scavenging gas at least intermittently in a closed circuit;  
bringing the scavenging gas into contact with a membrane; and  
separating fuel components contained therein downstream in a fuel direction.
7. The method according to claim 1, further comprising, following contact with a membrane, conducting the scavenging gas via a capacitor at which fuel components

contained in the scavenging gas are separated.

8. The method according to claim 1, further comprising, following contact with a membrane, conducting the scavenging gas via an accumulator material at which fuel components contained in the scavenging gas are stored temporarily.

9. The method according to claim 1, further comprising charging the scavenging gas with waste gases of one of a combustion engine, a turbine and a fuel cell.

10. The method according to claim 1, wherein the scavenging gas is made up of waste gases of one of a combustion engine, a turbine and a fuel cell.

11. A device for supplying a fuel for a combustion engine in a motor vehicle, comprising:

a separator module having a first cavity and a second cavity, the first cavity being provided with a supply line for the supply of the fuel and an outlet line for fractioned fuel, the second cavity being separated from the first cavity by a separation device, the second cavity having a supply line for a scavenging gas and an outlet line for the scavenging gas loaded with at least one fuel component.

12. The device according to claim 11, wherein the outlet line for the scavenging gas loaded with at least one fuel component is connected to at least one of an air intake and an injection system of a downstream combustion engine.

13. The method according to claim 11, wherein the outlet line for fractioned fuel is connected to a reformer of a fuel-cell system.

14. The method according to claim 1, wherein one of the separator module and the supply line for the scavenging gas includes a heating device.

15. The method according to claim 11, wherein the separation device includes a membrane made of a material in which a permeation of fuel components is

implemented in relation to a solubility in a membrane material.

16. The method according to claim 11, further comprising a membrane composed of a material in which a permeation of aromatic fuel components occurs.

17. The method according to claim 11, wherein the supply line for the supply of the fuel and the outlet line for fractioned fuel are connected to at least one of a bypass and the supply line for the scavenging gas, and the outlet line for the scavenging gas loaded with the at least one fuel component are connected by an additional bypass.

18. The method according to claim 11, wherein the first cavity and the second cavity, together with a membrane, are in the form of a hollow-fiber module.

19. A membrane material for separating components of a hydrocarbon mixture, comprising:

a polyimide for separating aromatic fractions of a fuel.